

Page 2

Serial No. 09/623,514

Attorney Docket No. 43922

according to SEQ ID NO:25, where the spacing and identity of the underlined amino acids are identical or are replaced by conserved substitutions.

6. (Amended) A vector according to claim 3, characterized in that said sequence is present in said vector in a sense orientation.

12. (Amended) A genetically transformed plant, characterized in that said genome has been transformed by a vector according to claim 3 or claim 4.

13. (Amended) A genetically transformed plant seed, characterized in that said seed has been transformed by a vector according to claim 3 or claim 4.

14. (Amended) A plant seed as claimed in Claim 11 or Claim 13, characterized by exhibiting an altered seed oil content compared to an average of a statistically-significant number of seeds of genomically-unmodified plants of the same genotype grown in identical conditions at the same time.

15. (Amended) A plant seed as claimed in Claim 11 or Claim 13, characterized by exhibiting an altered diacylglycerol content in its seed oil compared to an average of a statistically-significant number of seeds of genomically-unmodified plants of the same genotype grown in identical conditions at the same time.

16. (Amended) A plant seed as claimed in Claim 11 or Claim 13, characterized by exhibiting a seed oil with an altered fatty acyl composition compared to an average of a statistically-significant number of seeds a genomically-unmodified plant of the same genotype grown in identical conditions at the same time.

17. (Amended) A plant as claimed in Claim 10 or Claim 12, characterized by exhibiting an enhanced biomass compared to an average of a statistically-significant number

.../3

Page 3
Serial No. 09/623,514
Attorney Docket No. 43922

of genomically-unmodified plants of the same genotype grown in identical conditions at the same time.

C2 18. (Amended) A seed as claimed in Claim 11 or Claim 13, characterized by exhibiting an enhanced biomass compared to an average of a statistically-significant number of seeds of genomically-unmodified plants of the same genotype grown under identical conditions at the same time.

19. (Amended) A method of producing transgenic plants by introducing a nucleotide sequence into a genome of said plant, characterized in that said nucleotide sequence introduced into said genome includes SEQ ID NO:1 or SEQ ID NO:3, or a part of SEQ ID NO:1 or SEQ ID NO:3, or a sequence that is substantially homologous to SEQ ID NO:1, or to SEQ ID NO:3, or a part of SEQ ID NO:1 or SEQ ID NO:3.

C3 22. (Amended) A plant DNA sequence or part thereof, characterized in that the sequence is substantially homologous to at least a part of SEQ ID NO:1 or SEQ ID NO:3, and in that said sequence has been isolated, characterized or designed using sequence information from SEQ ID NO:1 or SEQ ID NO:3, or SEQ ID NO:1 containing an 81 bp insertion [SEQ ID NO:23] such that the deduced amino acid sequence of the encoded protein contains the repeated sequence SHAGLFNLCVVVLIAVNSRLLIENLMK according to SEQ ID NO:25, where the spacing and identity of the underlined amino acids are identical or are replaced by conserved substitutions.

23. (Amended) A method of changing the oil content, acyl composition or diacylglycerol/ triacylglycerol proportions of the seed oil of plant seeds by introducing a sense or anti-sense nucleic acid construct into a plant transformation vector, using the vector to transform the genome of a plant or plant seed, and then growing the plant or plant seed and extracting the oil from the plant seed, characterized in that said nucleic acid sequence is SEQ

Page 4
Serial No. 09/623,514
Attorney Docket No. 43922

c3 ID NO:1 or SEQ ID NO:3, or a part of SEQ ID NO:1 or SEQ ID NO:3, or a sequence that is substantially homologous to SEQ ID NO:1 or SEQ ID NO:3.--

*Attached hereto is a marked-up version of the changes made to the claims.
Also attached are the new claims pages.*